

may be mounted about an axis of rotation or turning of the pages. This may operate as a scroll wheel and/or a menu option selection device.

[0016] In preferred embodiments the page support contains active electronic components to drive the page display surface. In the case of a flexible page any rigid components that should not be bent may be incorporated into the page support.

[0017] As previously mentioned, preferably the electronic page comprises an electro-phoretic display such as E-ink™ and, in some particularly preferred embodiments, the page is flexible. In embodiments with one or more pages a page may roll up within a page mount or support.

[0018] In embodiments the display surface may comprise a touch-sensitive surface, to facilitate user interaction with the device. An example of a touch-sensitive electrophoretic display is described in WO 02/073572 (U.S. Pat. No. 7,030,854).

[0019] In embodiments a page may include a sensor to sense a bending force on a corner of the page, for example by means of the aforementioned touch-sensing function. The reading device may then include a bookmarking system to bookmark a location in a displayed document responsive to detection of this bending force. Preferably a bookmark symbol displayed with at the bookmarked place in the document. The sensor may sense either actual bending or pressure, for example pressure which, on a flexible screen, would cause bending. In embodiments the sensing may simply sense touching of a corner of the page. Preferably a bookmarking function is provided with a device with at least one flexible page. An electronic bookmark may comprise, for example, a tag stored in a memory of the reading device identifying a bookmarked location in a displayed document.

[0020] In embodiments the reading device also includes an interface to a docking station to enable one or both of uploading a document and recharging an internal power source of the reading device, when interfaced to the docking station.

[0021] In a related aspect the invention provides a detachable electronic page for an electronic document reading device, said electronic page having an electrical interface for interfacing with said reading device and a connecting portion for detachable coupling with said reading device.

[0022] The detachable electronic page may include either a wired or a wireless interface to the docking station for either or both of power and display data. In preferred embodiments the page comprises a non-volatile electrophoretic display and lacks an internal power supply. Preferably the page is flexible.

[0023] In a further related aspect the invention provides an electronic document reading device, the device including at least one electronic page having a display, and wherein said device is configured such that a user is able to bookmark a document displayed on said electronic page by applying a bending force to said electronic page.

[0024] In preferred embodiments the bending force for bookmarking a displayed document is applied to a corner of the page.

[0025] In a still further related aspect the invention provides a docking station for an electronic document reading device, the docking station including an interface for said reading device, and configured to perform one or both of uploading a document to said reading device and recharging an internal power source of said reading device.

[0026] Preferably the docking station also includes a processor to manage the interface with the reading device to co-ordinate document transfer and the like. The interface may be wired or wireless. In embodiments a common interface to

the reading device, for example a USB interface, may be employed for both data transfer and recharging.

[0027] In a further aspect the invention provides an electronic document reading device comprising two electronic pages turnably attached to a page spine, and wherein electronic circuitry of said document reading device is contained within said spine.

[0028] In a still further aspect the invention provides a method of updating a display on a turnable page of an electronic document reading device, the method comprising: sensing turning of said page; and updating said display in response to said sensing; and wherein said updating is at least partially hidden from a viewpoint of a user of said electronic reader viewing said page prior to said turning.

[0029] In some preferred embodiments the device has at least two display surfaces, for example a double-sided page or two single-sided pages, and the sensing comprises determining when one of the display surfaces is at least partially hidden from a viewer of the other display surface, the method then comprising updating the at least partially hidden display surface in response to the sensing. Generally this will involve reading the next page of display data from memory. In embodiments the device has at least two pages and the sensing determines when one of the pages is substantially hidden behind the other.

[0030] The invention further comprises an electronic document reading device comprising means for implementing a method as described above.

[0031] The invention further provides processor control code to implement the above-described methods, in particular on a data carrier such as a disk, CD- or DVD-ROM, programmed memory such as read-only memory (Firmware), or on a data carrier such as an optical or electrical signal carrier. Code (and/or data) to implement embodiments of the invention may comprise source, object or executable code in a conventional programming language (interpreted or compiled) such as C, or assembly code, code for setting up or controlling an ASIC (Application Specific Integrated Circuit) or FPGA (Field Programmable Gate Array), or code for a hardware description language such as Verilog (Trade Mark) or VHDL (Very high speed integrated circuit Hardware Description Language). As the skilled person will appreciate such code and/or data may be distributed between a plurality of coupled components in communication with one another.

[0032] The skilled person will understand that references to a document in the above-described aspects and embodiments of the invention are to be interpreted broadly including a wide range of materials such as newspapers, books, emails, attachments, web pages, other mark-up language documents, written music, images, video, graphical representations of audio, written computer programs and the like.

[0033] Broadly speaking, document encompasses any type of material which may be displayed on an electronic page.

[0034] As previously mentioned, in embodiments of all of the above aspects of the invention a page or display of the electronic document reading device may comprise an active matrix of organic TFTs (thin film transistors) on an organic, flexible substrate which drives an electrophoretic medium.

[0035] Features of aspects of the invention described above, and of embodiments of the above aspects of the invention, may be combined in any permutation.

[0036] These and other aspects of the invention will now be further described, by way of example only, with reference to the accompanying figures in which: